

**The Role of Medicaid Managed Care in Increasing Permanent Supportive Housing
Programs to Address Homelessness**

by

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Abstract

People experiencing homelessness have high rates of chronic health conditions, behavioral health needs, and substance abuse disorder. Because of the transient nature of homelessness, preventive health care utilization is rare and expensive acute care is common. In addition, people experiencing homelessness are more likely to lack health insurance. This puts a strain on hospitals that care for uninsured individuals and people who have high readmission rates in hospital facilities. This problem was partially addressed by expanding Medicaid eligibility under the Affordable Care Act. With Medicaid coverage, people experiencing homelessness have greater access to preventative care and supportive services. In addition, Medicaid 1115 waivers provide housing related supportive services.

Originally designed to meet the needs of individuals with disabilities, Permanent Supportive Housing (PSH) is a best practice in addressing homelessness nationwide. Once housed, people receiving PSH care are offered a variety of physical, behavioral, and social support services that help establish independence and long-term stability. Finding funding for PSH can be challenging with policy barriers in government insurance funding allocation and social service funding that is stretched thin as is. Building sustainable funding streams and increasing focus in addressing homelessness through Permanent Supportive Housing is a necessary public health approach to address the severe personal and societal impacts of homelessness.

This essay will focus on addressing Pennsylvania homelessness through innovative Permanent Supportive Housing initiatives that are funded, in part, by Medicaid Managed Care Organizations. The essay aims to provide context on the impact of homelessness on the healthcare industry and in doing so outline best practice in providing supportive services to improve efficient utilization through various innovative funding mechanisms. To provide background information, the essay starts by examining evidence on the impacts of homelessness on health status and healthcare utilization. The essay then outlines the challenges in financing housing and supportive services for Medicaid enrollees. Overall, the essay looks to Permanent Supportive Housing as a gold standard in increasing efficient healthcare utilization and improving community health.

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Preface

A person's quality of life is determined by many factors, of which accessibility to safe and stable shelter remain essential. Maslow's Hierarchy of Needs puts this physiological need as one of the most essential in a person's life followed by safety and security, social needs, self-fulfillment, and self-actualization (McLeod, 2018). People experiencing homelessness have competing priorities that make accessing the basic needs described by Maslow's Theory very difficult. As Dr. James O'Connell and his colleagues describe, "homelessness remains a bewildering complex public health challenge that has long thwarted simple solutions. Homelessness magnifies poor health, exposes those in crowded shelters to communicable diseases, complicates management of chronic illnesses, and uncovers deep fault lines in our health care system" (O'Connell et al, 2011). Homelessness is a growing public health problem in the United States, further exacerbated by the COVID-19 pandemic.

The United States government defines homelessness by which a person, "lacks a fixed, regular, and adequate, nighttime residence, and if they sleep in a shelter designated for temporary living accommodations or in places not designated for human habitation" ("The Law and Homelessness: Definition", n.d.). The rate of homelessness in the United States continues to rise. In 2019, 568,000 people were experiencing homelessness (Henry et al, 2020). The competing priorities mentioned above make accessing healthcare services difficult for people with unstable housing. This is due to several barriers including transportation, childcare, and commonly, lack of insurance. Consequently, health care utilization is often inefficient and minor health problems manifest into larger issues when left untreated. Poor health status makes accessing the services needed to secure housing and other needed support even more difficult.

There are many programs that address homelessness and provide supportive services in the United States and in Pennsylvania specifically. These services range from emergency shelters, which provide support for immediate needs, to longer term shelter, intensive programs such as Permanent Supportive Housing. Despite the growing demand for intensive programs like Permanent Supportive Housing, there are not enough available beds to accommodate the need. In Allegheny County, there were 13 open units per month available for Permanent Supportive Housing in 2019 (Vaithianathan et al, 2020). As of January 29, 2020, 887 people were experiencing homelessness in Allegheny County (DHS, 2020). With only 13 available Permanent Supportive Housing openings, there is a significant deficit of resources available to provide long term housing support.

Financing services like Permanent Supportive Housing can be complicated. Federal funds from the US Department of Housing and Urban Development (HUD) and the US Department of Health and Human Services (HHS) provide limited funding which is often insufficient to support the population in need. As of 2016, Allegheny County received a \$9.4 million grant dedicated to Permanent Supportive Housing from HUD (Allegheny County Department of Human Services, 2016). To finance programs efficiently, funding is often gathered from multiple sources which, in addition to HUD and HHS, include state and county governments. Though the Federal government heavily regulates the use of Medicaid dollars on housing, there are several innovative approaches to successfully utilize Medicaid dollars in supporting housing related services.

Permanent Supportive Housing is a best practice in housing intervention for people experiencing homelessness. According to the United States Interagency Council on Homelessness, “study after study has shown that supportive housing not only resolves homelessness and increases housing stability, but also improves health and lowers public costs” (“Supportive Housing”, 2018).

This approach removes barriers such as sobriety, connects individuals with safe and secure housing, and combines resources to provide robust additional supportive services. This essay will review the impact of Permanent Supportive Housing, analyze innovative funding streams, and provide examples of two successful Permanent Supportive Housing programs in Pennsylvania. Increasing access to Permanent Supportive Housing by looking at innovative funding streams will reduce future costs associated with inefficient healthcare utilization and improve the overall health and well-being of people experiencing homelessness.

1.0 Prevalence of Homelessness

Homelessness is a growing public health problem across the United States. On any given night in 2019, 568,000 people were experiencing homelessness in the US (Henry et al, 2020). As illustrated in **Figure 1**, 63% of this population was sleeping in an emergency shelter or in a transitional housing program (Henry et al, 2020). A large portion, almost 37%, were staying in places like abandoned buildings and on the streets, spaces that are not suitable for human habitation (Henry et al, 2020). These conditions create significant health implications and further inequities, including by race. As shown in **Table 1**, roughly 40% of the 568,000 people experiencing homelessness in 2019 were black while black people account for only 13% of the total United States' population (Henry et al, 2020). This illustrates systemic resource barriers that impact people of color.

In Pennsylvania, it was estimated that just over 13,000 people were experiencing homelessness in 2019 (Henry et al, 2020). This breaks down to roughly 10 out of every 10,000 Pennsylvania residents experiencing homelessness, 12.3% of whom are unsheltered (Henry et al, 2020). Though this is a decrease from previous years, it still represents a significant part of the population. As of January 29, 2020, 887 people were experiencing homelessness in Allegheny County (DHS, 2020). This number was 113 more than in 2019 and more people were identified as living in areas not meant to be inhabited (DHS, 2020). This number is expected to continue to rise both nationally and locally. Additional demographic information shows that 540 of the 881 people experiencing homelessness were men and 484 were black (DHS, 2019). As will be discussed in more depth later, the Allegheny County Department of Human Services, as well as various local

nonprofits and healthcare organizations, are working to address the rising rate of local homelessness.

2.0 Health Impacts

As healthcare is delayed to focus on other basic needs, illnesses and injuries progress and become bigger, more costly issues. Common problems for people experiencing homelessness include physical illness; physical, sexual, and emotional abuse; social isolation; substance abuse; and mental health concerns (Gelberg et al, 2000). Barriers such as difficulty finding transportation to appointments, lack of access to a phone or other ways to contact a doctor, and lack of transportation all contribute to the disproportionate burden of disease for people experiencing homelessness. Sleeping in unsheltered environments, or areas unfit for human habitation, increases the risk of infectious disease, risk of victimization, and significantly impact sleep patterns (Kushel, 2018). In addition, long term exposure to the elements can have dangerous health implications.

Diabetes mellitus is an example of a disease burden that is difficult to manage when experiencing homelessness. The prevalence of diabetes mellitus among people experiencing homelessness is 18% compared to 8% in the general public (Bharel et al, 2013). Without stable housing, people may struggle with challenges such as potential irregular meal schedules, the inability to refrigerate insulin, the challenges associated with needles which include cost and access, and challenges accessing nutritious food necessary for people who are diagnosed with diabetes mellitus. Chronic disease management prevents larger, more expensive problems down the line.

In a retrospective cohort study of electronic medical records for 986 patients experiencing homelessness, researchers found high rates of unintentional injury, psychiatric illness, traumatic injury from assault, food insecurity, substance abuse, and low access to primary care services (Amato et al, 2018). In this cohort, life expectancy was decreased more than 30 years and average

age of death was expected to be between age 42 and 52 (Amato et al, 2018). This burden of disease led to high acute care utilization and high rates of readmission to emergency departments. High readmission rates can be explained by several different factors. People experiencing homelessness have limited access to hygiene and toileting facilities that can make medication side effects very difficult to manage. In addition, medication and durable medical equipment are hard to manage without permanent shelter (Kushel, 2018). Food insecurity often corresponds with homelessness and special diet recommendations post discharge from a hospital are expensive and difficult to maintain (Kushel, 2018). Limited access to running water and electricity can further complicate discharge instructions for medication or medical equipment. These complications make healthcare difficult to navigate and result in unsustainable utilization of services. This leads to significant burden on health care organizations and the healthcare system overall.

With the ongoing need for social and economic intervention, health care access is an important barrier for people struggling to find housing. Delayed access leads to delayed care and increases the inefficient utilization of healthcare services. According to Dr. Christine T. Ma and her colleagues, preventative care is difficult to achieve when people are moving frequently, struggling to find and pay for housing, and seeking stable employment (Ma et al, 2008). People experiencing homelessness in the United States also have high rates of mental health and substance abuse issues which is indicative of the importance of early intervention (Franio, 2015). These challenges can be successfully addressed with housing intervention and supportive services that establish relationships in the community and promote long term self-sufficiency.

2.1 Healthcare Utilization

The inefficient utilization of healthcare services is defined as the underuse of low-cost primary or preventive care and high use of emergency department and inpatient care. This high use of emergency department and inpatient care quickly becomes a significant cost burden on individuals and healthcare organizations. Medicaid aims to address this cost burden and increase access to preventative care services. Medicaid Managed Care Organization waivers can also provide innovative partnerships that enhance Permanent Supportive Housing accessibility.

Readmission rates are substantially higher for people with unstable housing due to complications from: delayed care, lack of access to services, poor discharge coordination, and inefficient coordination of care. In addition, people experiencing homelessness have longer durations of stay in a hospital setting despite lower complexity services and lower comorbidity (Amato et al, 2018). A 2013 study found that people who experience housing instability triple the 30-day readmission rate compared to their housed counterparts, a phenomenon frequently referred to as “revolving door patients” (Franio, 2015). This revolving door phenomenon is difficult for both patients and the healthcare system as a whole.

As demonstrated previously, people experiencing homelessness have high rates of acute care utilization. The Boston Healthcare for the Homeless program (BHCHP) is an innovative organization addressing homelessness through a public health framework. A study done by Monica Bharel MD, MPH, et al, looked at disease burden and healthcare utilization of 2,578 community members served through the BHCHP program. This research found that 40% of this group had one emergency department visit and 7.9% visited the emergency department three or more times in a one-year time span (Bharel et al, 2013). A similar study was completed in 2010 that analyzed claims data from BHCHP and MassHealth. This research looked at 6,494 BHCHP community

members who were also enrolled in Medicaid in 2010. Two thirds of this group was found to struggle with mental health needs and 60% had a substance abuse disorder (Bharel et al, 2013). There were high rates of chronic conditions such as hypertension, chronic obstructive pulmonary disease (COPD), and diabetes mellitus among the studied group. In addition, the prevalence of infectious diseases such as Hepatitis C and HIV were significant (Bharel et al, 2013). As a result, this cohort had an average of 4 emergency department visits annually, one of which resulted in hospitalization with an average length of stay of seven days (Bharel et al, 2013). Half of the emergency department visits were attributable to behavioral health needs. This utilization of healthcare resources has large financial implications.

2.2 Healthcare Expenditures

Chronic conditions that are not managed can create more complex and expensive issues as care is delayed. In the 2010 study mentioned above, the average per member per month cost for people experiencing homelessness was \$2,036 compared to \$568 for all MassHealth Medicaid enrollees (Bharel et al, 2013). The cost associated with delayed care and inefficient utilization puts large financial pressure on healthcare organizations. Emergency departments are not designed to provide successful continuity of care and are an inefficient, costly use of health care services (Mitchell et al, 2017). Primary care is a stronger mechanism of care for non-emergency services and chronic disease management. Emergency departments are designed to be used for urgent, life threatening needs. A study of 515,373 patients who were identified as experiencing homelessness at the time of discharge in New York, Massachusetts and Florida found that care was most

frequently administered at safety net hospitals (Khatana et al, 2020). Safety net hospital emergency departments play a critical role in care for individuals experiencing homelessness.

A myriad of factors leads to the inefficient utilization of care for people experiencing homelessness. Many of these factors are out of the person's control but create financial hardship for the hospitals that provide services. To accommodate for the factors that increase readmission rates and length of stay, there is a high rate of discharge to skilled nursing facilities for people experiencing homelessness (Amato et al, 2018). This provides a structured environment to carry out a discharge plan as opposed to being on the street. Many hospital readmissions could be prevented with discharge to structured, lower levels of care such as permanent housing (Amato et al, 2018). As mentioned in the 2010 BHCHP and MassHealth study, there are high rates of mental health and substance abuse issues among the homeless population. Outreach and mental health support have been proven effective in reducing hospital readmission rates (Franio, 2015). This essay will analyze the effectiveness of Permanent Supportive Housing in reducing homelessness and thus reducing the cost burden on hospital systems who care for patients experiencing homelessness.

3.0 COVID-19 Impacts

As seen in **Figure 2**, homelessness has steadily declined in the United States since 2007 but with the economic impacts of the Coronavirus pandemic such as rising unemployment, frozen wages, and unpaid bills such as rent and utilities; these numbers are expected to rise significantly (Henry et al, 2020). For people experiencing housing instability, the impacts of the COVID-19 pandemic have been immense. An expert from the National Alliance to End Homelessness predicts an increase of homelessness by more than 250,000 this year (Moses, 2020). Being homeless during this state of emergency has increased stress and the risk of COVID-19 infection for people who are not housed is high. In addition to increased risk, people experiencing homelessness may also be more vulnerable to severe infection because of the prevalence of chronic conditions and the barriers in access to healthcare services (Lima et al, 2020). Utilization and access to health services are immensely important during a health crisis. The Boston Medical Center analyzed COVID-19 patient demographics from March 1, 2020 to May 18, 2020 and found that one in six were experiencing homelessness (Hsu et al, 2020). COVID-19 hospitalizations for people experiencing homelessness are further complicated with the barriers to self-isolation after discharge. Limited space and overcrowded facilities make social distancing very difficult in emergency shelters (Moses, 2020). The challenges of COVID-19 are immense among the entire population but even more difficult for people who are struggling to meet the first level in Maslow's Hierarchy of Needs with necessities such as housing.

4.0 Medicaid and ACA Expansion

Medicaid is a government health insurance product that provides coverage to people that meet low income and other eligibility requirements. In Pennsylvania, these requirements include being within a certain income threshold based on family size (as seen in **Table 2**); being a Pennsylvania resident; and a US Citizen, refugee, or lawfully admitted alien (“Medical Assistance General Eligibility Requirements”, n.d.). Pennsylvania demographic data reveals that as of June of 2020, Medicaid and the Children’s Health Insurance Product cover 3,069,309 individuals (Orgera et al, 2020). This access provides covered individuals with critical health care services. As shown in **Figure 3**, when the rate of uninsured individuals decrease so does the total uncompensated care spending in Pennsylvania (“Access & Spending”, n.d.). In 2017, Pennsylvania hospitals spent \$731,600,963 on uncompensated care with an uninsured rate of 5.5% (“Access & Spending”, n.d.). Without insurance, health care costs can be devastating for the patient and create strain on healthcare organizations such as safety net hospitals which serve a significant portion of uninsured individuals. Insurance coverage can provide individuals experiencing homelessness services such as preventative care and behavioral health care that could reduce the utilization of emergency room care and improve health outcomes.

Health insurance coverage for people experiencing homelessness exposes certain systemic barriers to enrolling in Medicaid coverage even when individuals meet eligibility requirements. A study conducted at an urban level one trauma center interviewed adults in an emergency department that were able to consent. This research analyzed barriers to enrolling in health insurance, among other things, for homeless individuals compared to housed individuals. There were 650 people interviewed, 20.2% of whom were experiencing homelessness (Fryling et al,

2015). The biggest barrier identified for people experiencing homelessness, as seen in **Figure 4**, was a lack of awareness of Medicaid qualification (Fryling et al, 2015). Other social, structural and systemic determinants of health can be very impactful, such as a lack of transportation or childcare if internet access is not available and the person must go into the social service office to apply for Medicaid (Friedman, 2020). In addition, required documentation and language barriers can present significant challenges to Medicaid enrollment. The Medicaid application process requires a driver's license or state ID, social security number, and a variety of documents that prove citizenship or immigration status, income, and tax documentation (Friedman, 2020). For individuals or families experiencing homelessness, providing these documents and organizing all that is necessary can prove to be difficult if not impossible. In addition to physical barriers, there are also high rates of distrust towards public systems among people experiencing homelessness. Researchers concluded that it is beneficial to perform targeted outreach and direct assistance for health insurance enrollment as a support service for people experiencing homelessness (Tsai et al, 2013). Addressing these barriers is a crucial element to reducing uninsured rates among individuals experiencing homelessness.

The Affordable Care Act (ACA) was signed into law on March 23, 2010 by President Obama in an effort to improve access to healthcare in the United States ("The Affordable Care Act's Role in Preventing and Ending Homelessness", 2015). The ACA has improved access to high quality care, increased inclusionary practices, improved resources for providers, and so much more (DiPietro, 2020). Before the Affordable Care Act, Medicaid coverage was available for people who qualified via income below the Federal Poverty Level (FPL) or were pregnant, disabled or had a child who was disabled. The ACA expanded Medicaid eligibility to people below 138% of the FPL ("The Affordable Care Act's Role in Preventing and Ending Homelessness",

2015). Before this expansion, most people experiencing homelessness were not considered eligible for health insurance coverage through Medicaid because they did not meet categorical eligibility requirements (such as having dependent children). Pennsylvania's Medicaid expansion has resulted in 765,600 new covered lives as of June of 2019 (Orgera et al, 2020). Increasing the number of Medicaid covered lives subsequently increases access to healthcare services that can save lives.

4.1 Medicaid Covered Supportive Services

Not only does health insurance coverage improve the overall health outcomes of vulnerable populations such as people experiencing homelessness, but it also reduces the cost burden on the safety net hospitals and community clinics who provide the greatest amount of care for this population. People experiencing homelessness benefit from case management and care coordination which improves access to primary care and preventive services. The services, along with additional supportive services, are made more readily available through Medicaid coverage. Unlike other payors, Medicaid covers supportive services like case management which are important for people experiencing homelessness.

Care coordination is essential to productively combine physical, behavioral, and other supportive services. For example, Medicaid covers certain housing services that establish a strong base for successful and long-term housing. This care coordination can also provide support in medication adherence and chronic disease management. As defined in previous sections, people experiencing homelessness often utilize acute healthcare services instead of primary and preventative care. Care coordination and case management can help individuals establish a primary

care provider who can provide a care plan that addresses chronic conditions instead of allowing these conditions to manifest into larger problems. These services are a form of advocacy that people experiencing homelessness can significantly benefit from.

5.0 Allegheny County Resources

The previous sections have outlined the significant impact homelessness has on personal health and healthcare utilization as well as current demographic information about federal, state and local homelessness. With this background information, it is important to understand the programs that are addressing homelessness and preventing future housing problems within the community. The Continuum of Care (CoC) is Allegheny County Department of Human Services' coordinated network for homeless services. There are a range of community-based services that are a part of the CoC. These include:

- Eviction prevention assistance
- Landlord mediation
- Rental and utility assistance
- Case management
- Street outreach
- Emergency shelter services
- Long-term housing which includes transitional housing, rapid rehousing, and permanent supportive housing (Vaithianathan et al, 2020).

Each of these services provide additional supportive services to prevent and address local homelessness. The Allegheny Homeless Advisory board represents community members, social service organizations and advocacy groups committed to addressing homelessness. This group plans, coordinates and operates the Continuum of Care while the Department of Human Services (DHS) runs the day-to-day operations (Moses, 2020). This program is consistently growing and evolving to address the needs of the community.

To best understand the services provided through the CoC, it is worth noting the specific details of each program. **Street Outreach** is directed towards people who are unsheltered and living in a space that is not safe or suitable for human habitation. This outreach provides direct services to meet basic needs and provides information for supportive services such as housing and behavioral health (Vaithianathan et al, 2020). **Emergency shelters** meet the immediate need of shelter for people who may not otherwise be housed. This service is temporary and can be overcrowded or unavailable. **Transitional housing** is one step up from an emergency shelter. This program provides shelter and support services for up to 24 months with the goal of establishing long term housing (Vaithianathan et al, 2020). The utilization of **rapid rehousing** provides people with immediate housing and support services with permanency in mind. Rapid rehousing programs include rental assistance and housing search assistance (“Allegheny County Continuum of Care”, n.d.). The most intense housing intervention is **Permanent Supportive Housing (PSH)**. PSH provides housing with no time limit and more intensive social services to encourage stability and independence. Historically speaking, Permanent Supportive Housing has been directed towards people with disabilities or families that include someone with a disability (“Allegheny County Continuum of Care”, n.d.). There is growing research to support Permanent Supportive Housing as the gold standard in intervening and addressing homelessness.

6.0 Permanent Supportive Housing: Approaches and Evidence

There has been a recent shift in homelessness intervention that identifies Permanent Supportive Housing as a best practice. The push is part of a US Department of Housing and Urban Development strategic initiative in which funding for transitional housing is decreased in order to expand PSH programs nationwide (“Allegheny County Point-in-Time Homelessness Data”, 2020). Permanent housing programs use a “housing first” methodology which prioritizes housing as a necessary building block and does not require a person to meet certain qualifications such as sobriety (Townley and Dorr, 2017). This model recognizes that housing is an immediate need and once it is accomplished, an individual can focus on advancing other human needs as described by Maslow’s Hierarchy of Needs. Once housed, individuals are able to receive greater physical and behavioral health care, substance abuse intervention, and social service intervention. The coordination of services makes it more likely that individuals will sustain benefits (Cassidy, 2016). Unlike other housing programs, there is no time limit and fees are established on a sliding scale (“Allegheny County Continuum of Care”, n.d.). Permanent Supportive Housing is an attractive option for many based on the variability in time, money, and care coordination services provided.

In addition, Permanent Supportive Housing can improve health care outcomes for the clients they serve. The University of Pittsburgh Medicaid Research Center conducted a study that analyzed 5,859 Pennsylvania residents in 54 counties who were Medicaid beneficiaries and were also involved in a Permanent Supportive Housing program with supportive services (Cole, 2019). This cohort had significant chronic health needs, behavioral health needs, and substance abuse related issues. Seven to fifteen months before their placement in a Permanent Supportive Housing program, the average medical spending was \$1,200 per person per month, 25% of which was

associated with emergency department utilization (Cole, 2019). After the third year in a Permanent Supportive Housing program, total Medicaid spending decreased by \$162 per member per month (Cole, 2019). This demonstrates the success of a housing first approach and related social services in improving health outcomes and providing stability.

As of January 31, 2021, 1,947 people in Allegheny County are utilizing Permanent Supportive Housing programs, a slight increase from the previous year (DHS, 2018). Permanent Supportive Housing programs have steadily grown since 2007 (**Figure 5**). Investing upfront in housing and social services significantly decreases the overall community cost burden of having people unhoused. An increase in PSH is directly related to a decrease in homelessness and in a global pandemic, Permanent Supportive Housing provides safer services than crowded emergency shelters. A study of 372 Continuum of Care programs across the country showed a steeper decline in homelessness with added PSH programs (Byrne et al, 2014). Not only does this initiative get people housed, but it also reduces inefficient healthcare utilization and improves community health. The push for increased Permanent Supportive Housing initiatives can continue to successfully grow nationwide with partnerships between Medicaid agencies, healthcare providers, and housing agencies (Townley & Dorr, 2017). These partnerships will help provide stable funding streams and resources needed to be successful in providing necessary services.

Despite the growth of Permanent Supportive Housing in recent years, supply continuously does not meet demand. As demonstrated in **Figure 6**, in 2020 there was an increase in Allegheny County residents who experienced unsheltered homelessness but no significant difference compared to the previous 5 years in the utilization of emergency shelters or transitional housing programs (DHS, 2020). This can be explained, among other factors, by a limited number of available beds in these programs. According to a DHS methodology report released in September

of 2020, there were 20 available units per month for rapid rehousing, 18 available units per month for transitional housing, and 13 available units per month available for permanent supportive housing in 2019 (Vaithianathan et al, 2020). In July of 2019, 369 individuals and 86 families were identified as being on a housing waitlist (Vaithianathan et al, 2020). This shows significant unmet need for individuals and families who experience homelessness.

In 2019, 600 families and 1450 individuals were identified as experiencing homelessness and eligible for transitional housing, rapid rehousing, and permanent supportive housing in Allegheny County (Vaithianathan et al, 2020). These programs aim to provide housing and other supportive services in an effort to reestablish the satisfaction of basic needs and establish long term housing. As mentioned above, these programs have a very limited number of available units based on low turnover and other factors. Because of this, there is a housing gap in Allegheny County where not everyone who needs shelter and support services is able to receive this help. Based on the local population that meets the criteria for homelessness, Allegheny County currently does not have enough long-term supportive housing. The methodology report mentioned above, cites that there is a housing gap of 1,200 units and the county can only serve half of the households that are assessed for homeless services (Vaithianathan et al, 2020). This creates a significant challenge of deciding which individuals and families are the most vulnerable and in need of supportive services. As experts expect a growing rate of homelessness in the US, this gap in available housing support will continue to be a public health problem necessary to address.

6.1 Medicaid Supporting PSH

Funding Permanent Supportive Housing can be complicated. To finance programs efficiently, funding is often gathered from multiple sources which, in addition to HUD and HHS, include state and county governments. Finding stable funding streams will allow Permanent Supportive Housing programs to continue to grow. Though federal regulation presents strict rules about the matching of state Medicaid spending on room and board, Medicaid dollars are able to provide support in financing a wide range of housing services (Paradise & Cohen Ross, 2017). These housing services include transition services, housing and tenancy support, and housing related collaboration activities (Cassidy, 2016). Permanent Supportive Housing supports the Medicaid program's overall goals because it works to reduce expensive utilization of care by establishing stability for people who have experienced homelessness. Improving patient care, population health, and lowering overall healthcare spending are all essential elements of Medicaid that Permanent Supportive Housing helps address (Paradise & Cohen Ross, 2017). Specific healthcare metrics such as medication adherence, reduced length of stay when admitted, and reduced overall emergency department visits are all improved with stable housing. As addressed in the study completed by the University of Pittsburgh's Medicaid Research Center, Permanent Supportive Housing also offsets operating costs by reducing costs in other health care and social service areas (Cole, 2019). With Medicaid expansion under the Affordable Care Act, millions of people have access to greater support and care coordination. Including Permanent Supportive Housing in this care coordination improves outcomes tremendously and increases the overall health of the members served.

6.2 Medicaid Managed Care to Support Housing Options

Medicaid Managed Care Organizations (MCOs) are paid on a per member per month basis and have greater flexibility in covered services compared to the traditional fee for service insurance model. MCOs cover a large majority of enrollees and provide critical access to healthcare services. There are several ways that a Medicaid Managed Care Organizations can support a housing initiative. One such method is the funding of transitional services such as tenant screening, housing assessments, support in the development of a housing plan, assistance with housing applications and monetary support for important items like a security deposit (Paradise & Cohen Ross, 2017). Another potential venue is through housing sustaining services like education and training for both landlords and tenants on the importance of establishing clear responsibilities that reduce subsequent rates of eviction (Paradise & Cohen Ross, 2017). Additionally, MCOs can develop agreements with local housing organizations to increase access to housing resources (Paradise & Cohen Ross, 2017). None of these services directly fund a member's housing but all have positive downstream effects. MCOs have an important stake because the healthier their members are, the lower the associated long-term costs will be. Investing upfront in social and structural determinants of health, like housing, provides significant benefit in subsequent years.

6.3 Section 1115 Waivers

In addition, many state Medicaid programs have used Section 1115 waivers to support Permanent Supportive Housing programs. Section 1115 waivers give states flexibility in addressing coverage, access, and quality (Townley & Dorr, 2017). This waiver provides a delivery

system reform incentive payment (DSRIP) for such initiatives (Townley & Dorr, 2017). In California, the 2020 Medi Cal Demonstration, or California's 1115 waiver, focuses on high-risk utilizers of healthcare services who are homeless in pilots that address all aspects of care (Townley & Dorr, 2017). This includes coordinating housing to include care management services. The Louisiana Medicaid program focuses specifically on Permanent Supportive Housing. This program focuses on tenancy services such behavioral health, crisis intervention, and psychiatric supportive treatment are (Townley & Dorr, 2017). The result was a 24% decrease in Medicaid costs of participants (Townley & Dorr, 2017). Pennsylvania's 1115 waiver also contains language about housing services. Specifically, "housing transition and tenancy sustaining services" ("Pennsylvania Waiver Factsheet", n.d.). Overall, the various state initiatives described above focus on housing as a means to improve overall health outcomes and increase the efficient utilization of healthcare services.

7.0 Pennsylvania Permanent Supportive Housing Programs

Pennsylvania has two successful Permanent Supportive Housing programs that utilize funding and resources innovatively. In Philadelphia, Project Home reinvests savings from behavioral health services into a Permanent Supportive Housing program that offers a variety of supportive services. In Pittsburgh, UPMC Health Plan has created a program called Cultivating Health for Success which is partially funded by a grant from the Allegheny County Continuum of Care and offers a variety of services to qualifying individuals. In both Pennsylvania Permanent Supportive Housing programs, the Institute of Medicine's Core Principles of Public Health are followed in depth. These principles include identifying community health problems, mobilizing community partners, linking people to services, and promoting health and safety (Bharel et al, 2013). These programs invest upfront in addressing immediate housing needs and then focusing on physical and behavioral health needs, food security, and assistance with other daily living needs with the help of other community partners. The investment in housing creates stability, a greater sense of independence, and improved health for the members served.

7.1 Philadelphia County's Permanent Supportive Housing Model

Philadelphia's poverty rate was 25.7% in 2019 ("Homelessness in Philadelphia", n.d.). At this time, 6,000 people were living in areas that are considered uninhabitable by humans ("Homelessness in Philadelphia", n.d.). The homeless population, as discussed previously, statistically have poorer health status. The mortality rate in a cohort of homeless adults in the city

of Philly was three and a half times higher than the general population (O'Connell et al, 2011). Medicaid MCOs in the area are using these statistics to build a dynamic public health approach to addressing housing needs.

Pennsylvania provides counties with the opportunity to manage behavioral health services for residents. Philadelphia created a single payer system for behavioral health services, which services 600,000 enrollees and is at full financial risk (Paradise & Cohen Ross, 2017). In return, the program receives \$800 million of capitation payments from Medicaid (Paradise & Cohen Ross, 2017). In this model, the city is able to fully tailor the services provided to the specific population that it serves. This generates savings which are reinvested into improvement initiatives such as addressing homelessness (Paradise & Cohen Ross, 2017). In return for accepting full risk, Philadelphia was able to create a successful program to address local needs.

Permanent Supportive Housing, with a housing first approach, was one of the initiatives chosen to reinvest in. The Project Home program provides 500 people experiencing chronic homelessness with housing, clinical care, case management, mobile psychiatric services, and peer to peer support (Paradise & Cohen Ross, 2017). In 8 years, 1,200 people have participated in the PSH program, 89% of which remain in stable housing and are no longer using support services (Paradise & Cohen Ross, 2017). The cost per member per day before the program was \$85 (Paradise & Cohen Ross, 2017). To account for behavioral health services during the program, the cost was \$112 per member per month. After housing intervention, the cost per member per day dropped to \$18, a significant decrease (Paradise & Cohen Ross, 2017). This PSH initiative was successful in reducing per member per day costs by \$67 dollars. By pursuing a housing first model, the initiative was able to stabilize housing and then focus on overall mental health needs to reduce costs and improve member health.

7.2 UPMC Health Plan Permanent Supportive Housing Model

UPMC Health Plan's Permanent Supportive Housing program, Cultivating Health for Success, provides an innovative example of a Medicaid MCO addressing homelessness. This program serves 47 people a year with a mission "to create a residential environment that foster greater autonomy, coordinated care, and ability of participants to bridge the gap from homeless to permanent housing with greater physical health" ("Cultivating Health for Success Program", n.d.). The program follows a housing first model and focuses on harm reduction. Participants must be chronically homeless, be a UPMC for You Medicaid beneficiary, have 1 year of high healthcare expenditures, and be able to live independently ("Cultivating Health for Success Program", n.d.). Once determined eligible, participants are placed in scattered Permanent Supportive Housing. Allegheny County's Continuum of Care Permanent Supportive Housing grant helps fund rental assistance and the administrative costs associated with this program ("Cultivating Health for Success Program", n.d.). UPMC Health Plan's Medicaid product, UPMC for You, provides care management, medication management and links to community resources. They work collaboratively with the housing staff, who provide housing support and case management.

Services in the Cultivating Health for Success program are robust. They include assistance with daily living tasks, assistance with nutritious meal preparation and grocery shopping, help making and retaining appointments, creating goals, coordination with providers, landlord mediation and furnishing assistance ("Cultivating Health for Success Program", n.d.). Providing this variety of care management helps establish a primary care provider relationship and coordinate care successfully. To measure success, benchmarks include maintaining stable housing for at least 6 months, decreasing unplanned care, limiting inpatient admission and emergency department visits, and increasing primary and specialty care ("Cultivating Health for Success Program", n.d.).

In order to offset the program costs, 25 members must be successfully housed (“Cultivating Health for Success Program”, n.d.).

The results provide evidence of significant improvement in healthcare utilization among the members served. As seen in **Figure 7**, hospital facility visits decreased significantly after being housed and primary care office visits were on a steady incline (“Cultivating Health for Success Program”, n.d.). A five-year longitudinal study proved that unplanned care costs decreased, rates of primary and specialty care visit doubled, and pharmacy costs increased meaning members were following medication adherence best practices (“Cultivating Health for Success Program”, n.d.). The resulting average net savings for UPMC for You members in the program were \$6,384 per member (“Cultivating Health for Success Program”, n.d.). This shows significant success in addressing the healthcare and human service needs of the members in this program.

In 2019, UPMC Health Plan expanded their partnership with a Pay for Success to provide housing for additional homeless and at-risk-for-homelessness members. Based on the initial success of this program, the Cultivating Health for Success program has been expanded to include people who do not fit the HUD definition of homeless but may still be experiencing housing instability. The expanded program provides similar case management and housing support but will serve more members and will help to connect individuals with unused Section 8 housing vouchers.

8.0 Conclusion

Maslow's Hierarchy of Needs suggests that housing is a tier one requirement that is necessary to advance in any other aspect of life. People experiencing homelessness have high rates of chronic health conditions, behavioral health needs, and substance abuse disorder. Because of the transient nature of homelessness, productive health care utilization is rare and expensive emergency room care is common. This puts a strain on hospitals who care for uninsured individuals and people who researchers call "frequent flyers" who have high readmission rates in hospital facilities. This problem was partially addressed by expanding Medicaid eligibility under the Affordable Care Act. With Medicaid coverage, people experiencing homelessness have greater access to preventative care and supportive services. In addition, Medicaid 1115 waivers provide housing related supportive services.

As discussed throughout this paper, funding for Permanent Supportive Housing often comes from the combination of a variety of sources and can be unreliable. As homelessness continues to be a large public health concern, finding innovative funding streams for Permanent Supportive Housing will be critically important in increasing housing stability in Pennsylvania and across the United States. Medicaid Managed Care Organizations should continue to build supportive capacity for Permanent Supportive Housing. Both the Philadelphia County and UPMC Health Plan PSH programs show specific initiatives that generate significant cost savings and increase member health. Once housed, people receiving PSH care are offered a variety of physical, behavioral, and social support services that help establish independence and long-term stability. Building sustainable funding streams and increasing focus in addressing homelessness through

Permanent Supportive Housing will have large scale positive impacts on public health among the homeless.

9.0 Figures

EXHIBIT 1.2: Homelessness
By Household Type and Sheltered Status, 2019

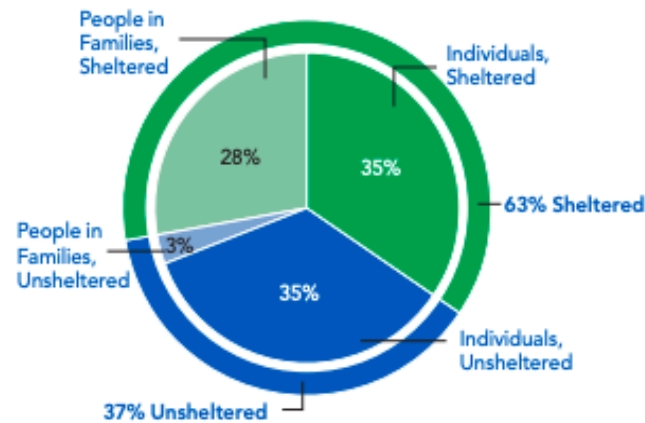


Figure 1: US Homelessness Sheltered Status (Henry et al, 2020)

EXHIBIT 1.1: PIT Estimates of People Experiencing Homelessness
By Sheltered Status, 2007–2019

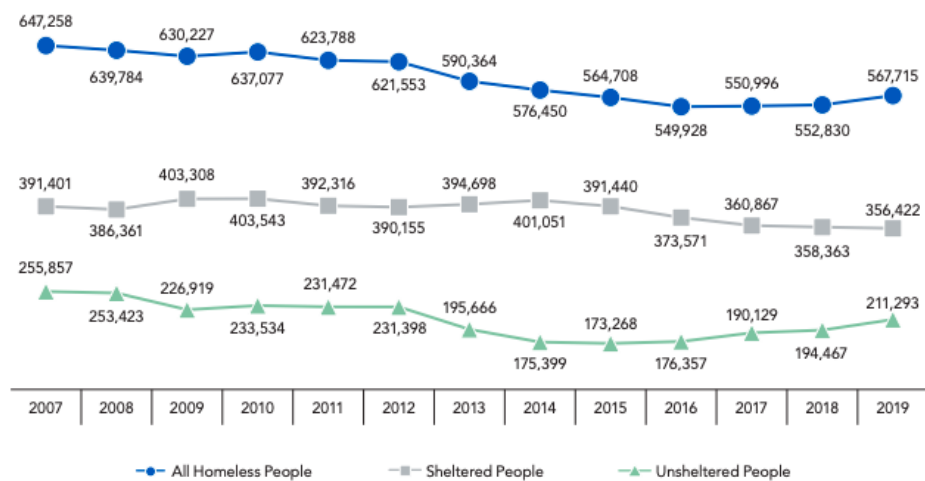


Figure 2: US Homelessness Count Over a Period of Thirteen Years (Henry et al, 2020)

Pennsylvania's Uninsured Rates & Uncompensated Care, 2014-17

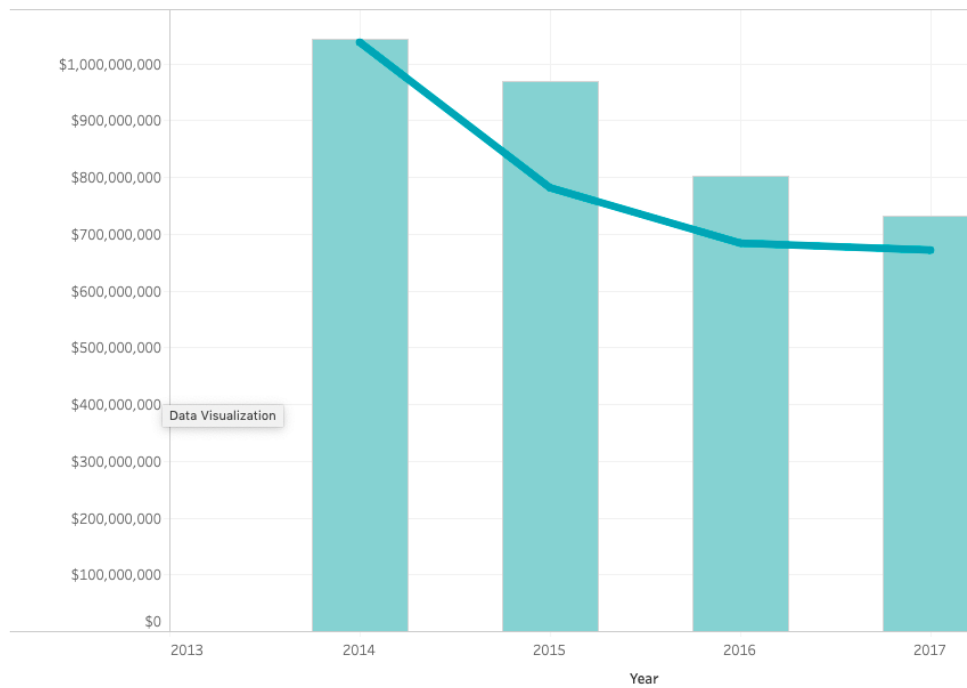


Figure 3: PA's Uninsured and Uncompensated Care Rates ("Access & Spending", n.d.)

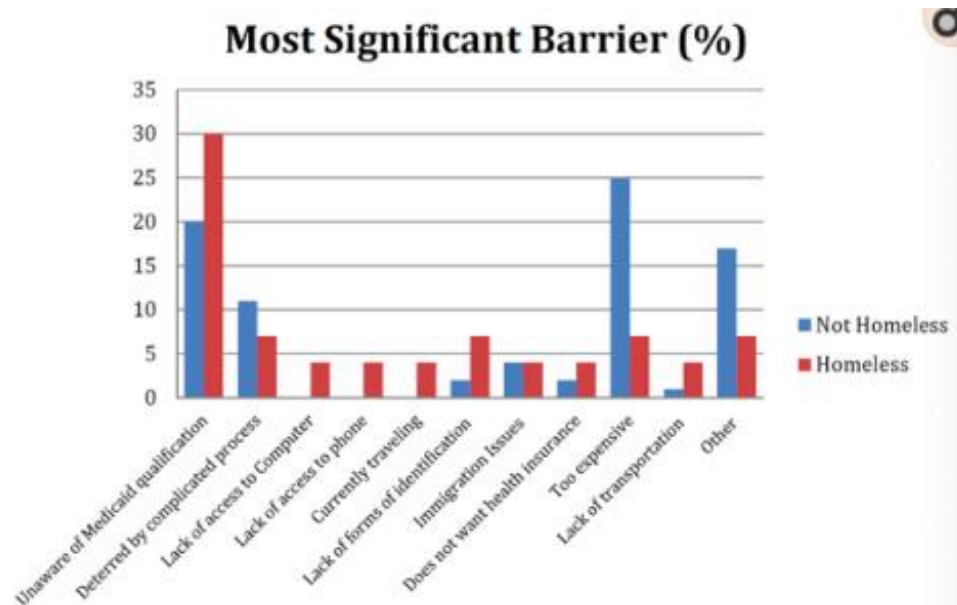


Figure 4: Barriers to Health Insurance Coverage (Fryling et al, 2015)

EXHIBIT 7.3: Inventory of Beds for Homeless and Formerly Homeless People
2007–2019

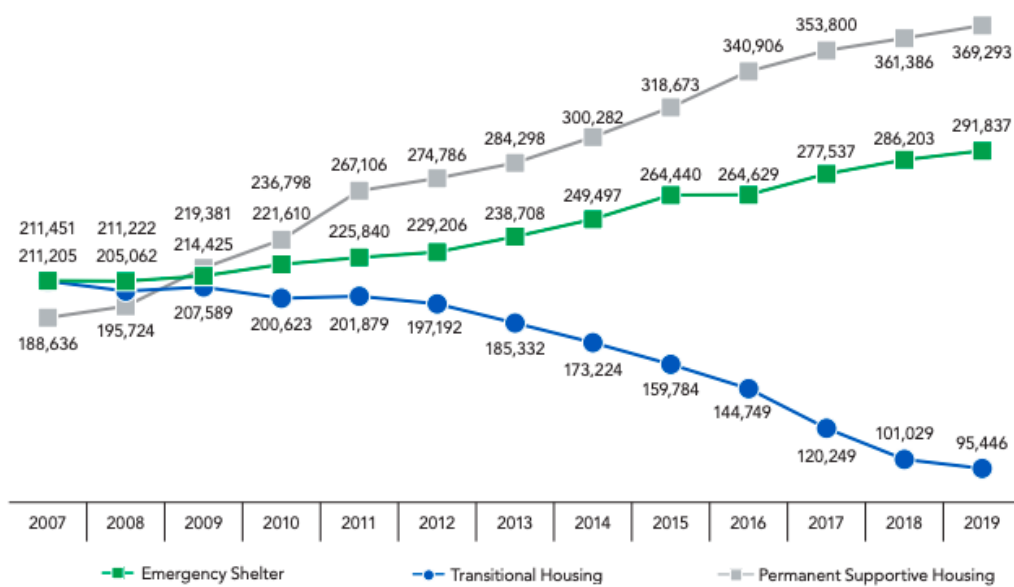


Figure 5: Inventory of Beds for Homeless and Formerly Homeless People in the US (Henry et al., 2020)

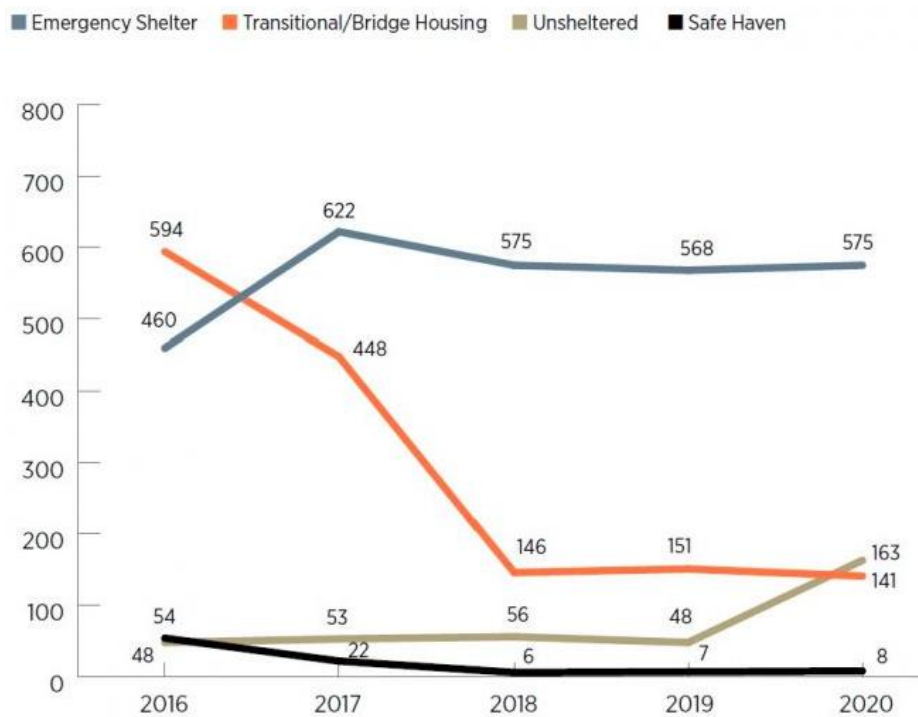


Figure 6: Allegheny County Point in Time Homelessness Trends by Shelter Type (DHS, 2020)

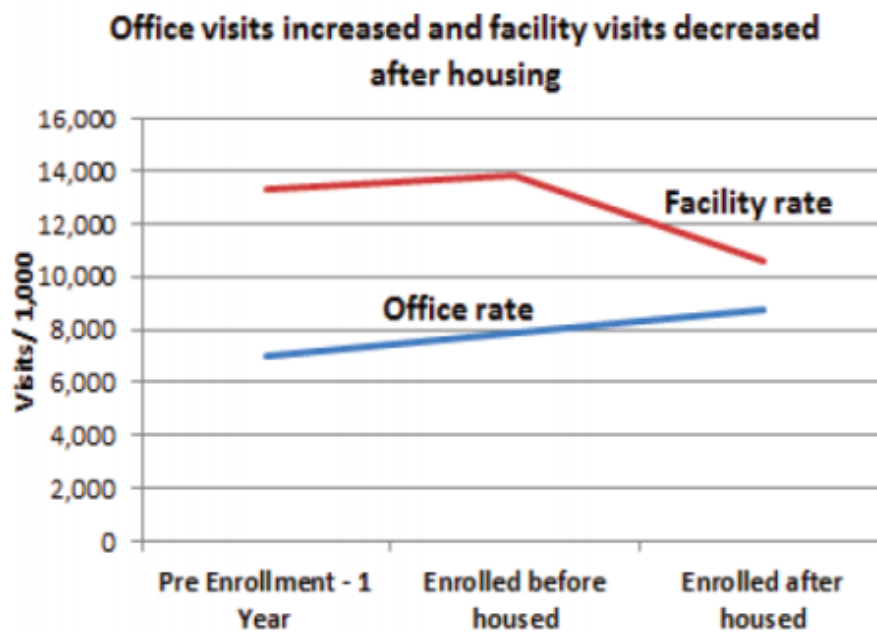


Figure 7: Healthcare Utilization in the CHS Program (“Cultivating Health for Success Program”, n.d.)

10.0 Tables

Table 1: US Homelessness Demographics (Henry et al, 2020)

Characteristic	All Homeless People		Sheltered People		Unsheltered People	
	#	%	#	%	#	%
Total homeless	567,715	100%	356,422	100%	211,293	100%
Age						
Under 18	107,069	18.9%	97,153	27.3%	9,916	4.7%
18 to 24	45,629	8.0%	28,840	8.1%	16,789	7.9%
Over 24	415,017	73.1%	230,429	64.7%	184,588	87.4%
Gender						
Female	219,911	38.7%	157,211	44.1%	62,700	29.7%
Male	343,187	60.5%	197,678	55.5%	145,509	68.9%
Transgender	3,255	0.6%	1,236	0.3%	2,019	1.0%
Gender Non-Conforming	1,362	0.2%	297	0.1%	1,065	0.5%
Ethnicity						
Non-Hispanic/Latino	443,100	78.0%	279,940	78.5%	163,160	77.2%
Hispanic/Latino	124,615	22.0%	76,482	21.5%	48,133	22.8%
Race						
White	270,607	47.7%	151,120	42.4%	119,487	56.6%
African American	225,735	39.8%	169,354	47.5%	56,381	26.7%
Asian	7,228	1.3%	3,743	1.1%	3,485	1.6%
Native American	17,966	3.2%	7,980	2.2%	9,986	4.7%
Pacific Islander	9,311	1.6%	4,025	1.1%	5,286	2.5%
Multiple Races	36,868	6.5%	20,200	5.7%	16,668	7.9%

Table 2: PA Medicaid Eligibility by Income and Family Size (“Pennsylvania Medicaid Program”, n.d.)

Annual Household Income Limits (before taxes)

Household Size*	Maximum Income Level (Per Year)
1	\$16,971
2	\$22,930
3	\$28,888
4	\$34,846
5	\$40,805
6	\$46,763
7	\$52,722
8	\$58,680

*For households with more than eight people, add \$5,958 per additional person. Always check with the appropriate managing agency to ensure the most accurate guidelines.

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